UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

APR 17 2014

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Mike Henry
Environmental Manager
Exide Technologies
2601 West Mount Pleasant Boulevard
Muncie, Indiana 47302

Mr. Frederick Ganster
Director: Environment, Health, & Safety
Exide Technologies
2900 Montrose Avenue
Reading, Pennsylvania 19605

Re: Finding of Violation under 42 U.S.C. § 7413(a)(3)

Dear Messrs. Henry and Ganster:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violations (FOV) to Exide Technologies (Exide) for violations of the Clean Air Act (CAA) identified at the facility located at 2601 West Mt. Pleasant Boulevard, Muncie Indiana (the Facility). The FOV is issued in accordance with Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3).

As outlined in the FOV, the EPA finds that Exide has violated the CAA, the Facility's Title V Operating Permit, and the National Emission Standards for Hazardous Air Pollutants for Secondary Lead Smelting. Section 113 of the CAA, 42 U.S.C. § 7413, gives us several enforcement options to resolve these violations. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference. In this instance, we expect an attorney from the U.S. Department of Justice to attend the conference along with EPA representatives.

The EPA contact in this matter is Eleanor Kane. You may call her at (312) 353-4840 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

George T. Czerniak
Director
Air and Radiation Division

Enclosure

cc: Phil Perry, Chief
Air Compliance and Enforcement Branch
Indiana Department of Environmental Management
100 N. Senate Ave.
Mail Code 61-53 IGCN 1003
Indianapolis, IN 46204-2251

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
Exide Technologies	)	Proceeding Pursuant to the Clean Air Act,
Muncie, Indiana	)	42 U.S.C. §§ 7401-7671q
	)	
	)	**EPA-5-14-IN-03**
	)	
	)	

FINDING OF VIOLATION

The U.S. Environmental Protection Agency is issuing this Finding of Violation (FOV) to Exide Technologies (Exide) to notify you that we have found violations of the Clean Air Act (CAA), 42 U.S.C. §§ 7401-7671q, at the Exide facility located at 2601 West Mt. Pleasant Boulevard, Muncie, Indiana (the Facility). The relevant statutory and regulatory background, factual background, alleged violations, and environmental impact of these violations are set forth in detail below.

This FOV is issued in accordance with Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3), which authorizes the Administrator to take certain enforcement actions after notifying a person that it is in violation of the CAA. The authority to issue this FOV has been delegated by the Administrator to the Regional Administrator and re-delegated to the Director of the Air and Radiation Division for Region 5 of the EPA.

Relevant Statutory and Regulatory Background

National Emission Standards for Hazardous Air Pollutants

1. Section 112(c) of the CAA, 42 U.S.C. § 7412(c), requires the EPA to promulgate a list of all categories and subcategories of new and existing "major sources" of hazardous air pollutants (HAPs), and establish emissions standards for the categories and subcategories. These emission standards are known as National Emission Standards for Hazardous Air Pollutants (NESHAP). The EPA codified these standards at 40 C.F.R. Parts 61 and 63.

2. "Stationary source" is defined as "any building, structure, facility, or installation, which emits or may emit any air pollutant." 42 U.S.C. § 7411(a)(3).

3. "Hazardous air pollutant" is defined as "any air pollutant listed in or pursuant to" Section 112(b) of the CAA, and includes, among other pollutants, lead compounds. 42 U.S.C. § 7412(a)(6).

4. Section 112(i)(3) of the CAA, 42 U.S.C. § 7412(i)(3), prohibits any person subject to a NESHAP from operating a source in violation of a NESHAP after its effective date. *See also* 40 C.F.R. §§ 61.05 and 63.4.

The NESHAP for Secondary Lead Smelting

5. Pursuant to Section 112 of the CAA, the EPA has promulgated a NESHAP for Secondary Lead Smelting, which has been amended periodically and codified at 40 C.F.R. Part 63, Subpart X (the Secondary Lead NESHAP). *See* 60 Fed. Reg. 32587 (June 23, 1995); 62 Fed. Reg. 32216 (June 17, 1997); 64 Fed. Reg. 4572 (January 29, 1999); 64 Fed. Reg. 69643 (December 14, 1999); 70 Fed. Reg. 75320 (December 19, 2005); 77 Fed. Reg. 555 (January 5, 2012). Under the Secondary Lead NESHAP, the Facility's compliance date for the amendments promulgated in 2012 was January 6, 2014. Exide had a legal obligation to achieve early compliance with certain requirements of the Secondary Lead NESHAP under Indiana regulations codified at 326 IAC 20-13.1.

6. 40 C.F.R. § 63.541(a) states that the Secondary Lead NESHAP applies to the following affected sources at all secondary lead smelters: blast, reverberatory, rotary, and electric furnaces; refining kettles; agglomerating furnaces; dryers; process fugitive emissions sources; buildings containing lead bearing materials; and fugitive dust sources.

7. In 40 C.F.R. § 63.542, "total enclosure" is defined as "a containment building that is completely enclosed with a floor, walls, and a roof to prevent exposure to the elements and to assure containment of lead bearing material with limited openings to allow access and egress for people and vehicles. The total enclosure must provide an effective barrier against fugitive dust emissions such that the direction of air flow through any openings is inward and the enclosure is maintained under constant negative pressure."

8. 40 C.F.R. § 63.544(a)(5) requires that casting areas be operated in a total enclosure that is maintained at negative pressure at all times and vented to a control device designed to capture lead particulate. The total enclosure must meet the requirements specified in § 63.544(c).

9. 40 C.F.R. § 63.548(k) states that the source must install, operate, and maintain a digital differential pressure monitoring system to continuously monitor each total enclosure, as described in § 63.548(k)(1-5).

10. 40 C.F.R. § 63.543(l) requires that sources develop and follow standard operating procedures designed to minimize emissions of total hydrocarbons for each startup or shutdown scenario anticipated.

11. 40 C.F.R. § 63.543(c) requires that sources meet the applicable emissions limits for total hydrocarbons (THC) and dioxins and furans (D/F) from furnace sources as specified in Table 2 of the Secondary Lead NESHAP.

12. 40 C.F.R. § 63.548(j)(1) states that sources must install, calibrate, maintain, and continuously operate a device to monitor and record the temperature of the afterburner or

furnace exhaust streams consistent with the requirements for continuous monitoring systems in § 63.8.

13. 40 C.F.R. § 63.548(j)(2) states that prior to, or in conjunction with, the initial performance test to determine compliance with § 63.543(c), sources must conduct a performance evaluation for the temperature monitoring device according to § 63.8(e).

14. 40 C.F.R. § 63.548(j)(3) provides that sources must monitor and record the temperature of the afterburner or the furnace exhaust streams every 15 minutes during the initial performance test for THC and D/F and determine an arithmetic average for the recorded temperature measurements.

15. 40 C.F.R. § 63.543(k) states, in part, that a facility owner must at all times, "operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions."

Title V Requirements

16. Title V of the CAA, 42 U.S.C. §§ 7661-7661f, established an operating permit program for major sources of air pollution. Section 502(d)(1) of the CAA, 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to EPA an operating permit program which meets the requirements of Title V. Pursuant to Appendix A of 40 C.F.R. Part 70, on December 4, 2001, EPA granted Indiana final approval of its Title V Clean Air Act Permit Program, effective November 30, 2001. 66 Fed. Reg. 62969.

17. 40 C.F.R § 70.2 defines "major source" as, among other things, any stationary source that directly emits, or has the potential to emit: (i) 10 tons per year or more of any hazardous air pollutant listed pursuant to CAA Section 112(b); (ii) 25 tons or more of any combination of hazardous air pollutants; and/or (iii) 100 tons per year or more of any other air pollutant subject to regulation under the CAA.

18. Indiana's Title V operating permit program regulations are codified at 326 IAC 2-7, and are federally enforceable pursuant to Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3).

19. 40 C.F.R. § 70.6(b)(1) provides that Title V permits are federally enforceable and that all terms and conditions in a Title V permit are enforceable by the EPA.

Exide's Title V Permits

20. The Indiana Department of Environmental Management (IDEM) issued a modified Part 70 Operating Permit, No. 035-33188-00028 (Title V Permit) to the Facility on February 4, 2014. By its terms, the Title V Permit took effect immediately upon issuance. This permit incorporates by reference the Secondary Lead NESHAP in Section E.

21. Conditions D.2.1 and D.2.2 of the Title V Permit establish particulate matter (PM) and lead emission limits for the pig casting units and the pot furnaces.

22. Condition D.2.4(a) of the Title V Permit requires that, in order to ensure compliance with Conditions D.2.1 and D.2.2, the refinery baghouses (No. 1 and No. 2) shall be in operation at all times that the two lead pig casting machines and the eleven pot furnaces are in operation.

23. Conditions D.3.1 and D.3.2 of the Title V Permit establish PM and lead emission limits for, among others, the material handling, slag crushing, and insignificant melting pots controlled by the bin room baghouses (No. 1 and No. 2).

24. Condition D.3.4(b) of the Title V Permit requires that, in order to ensure compliance with Conditions D.3.1 and D.3.2, the bin room baghouses (No. 1 and No. 2) shall be in operation at all times that slag crushing is in operation.

Relevant Factual Background

25. Exide owns and operates the secondary lead smelting stationary source Facility located at 2601 West Mt. Pleasant Boulevard, Muncie, Indiana.

26. The Facility is a secondary lead smelter and is therefore subject to the requirements of the Secondary Lead NESHAP (40 C.F.R., Part 63, Subpart X).

27. In response to an information request from EPA issued on February 27, 2013, Exide provided a Ventilation Study performed in 2012 by a third party (2012 Ventilation Study).

28. The 2012 Ventilation Study states, "The building requires additional ventilation to guarantee the NESHAP for Secondary Lead Smelting requirements are met." Among other things, the 2012 Ventilation Study specifically states that the breaker room requires 71,000 actual cubic feet per minute of additional airflow.

29. On February 24 and 25, 2014, EPA conducted an inspection at the Facility.

30. During the February 2014 inspection, Exide personnel provided information on where in the Facility Bin Room Baghouse No. 2 and Refinery Baghouse No. 2 would provide additional ventilation. No additional ventilation was planned for the breaker room.

31. During the February 2014 inspection, Exide personnel provided information on the differential pressure monitoring system installed at the Facility, including identifying the location of three differential pressure sensors. The Facility has not installed a differential pressure sensor in the breaker room.

32. At the Facility, Exide operates a Strip Casting Machine which liquefies lead blocks into molten lead, and casts the lead into long, thin strips. The Strip Casting Machine is located within a casting area where casting operations occur, and it is therefore subject to

total enclosure requirements under 40 C.F.R. §§ 63.542 and 63.544(a)(5) and the differential pressure monitoring requirements imposed by 40 C.F.R. § 63.548(k). The Strip Casting Machine is not located within a containment building that meets the requirements for a total enclosure under the Secondary Lead NESHAP. There is no digital differential pressure monitoring system serving the building that contains the Strip Casting Machine.

33. During the February 2014 inspection, Exide personnel reported that they had not developed standard operating procedures designed to minimize emissions of total hydrocarbon for each startup or shutdown scenario anticipated.

34. During the February 2014 inspection, EPA inspectors noted that there was no instrumentation in place to monitor or record the temperature of the furnace exhaust from the blast furnace or reverberatory furnace.

35. A performance test was conducted at the Exide facility to measure emissions of D/F from the North and South Process Scrubber Stacks (serving the blast furnace and reverberatory furnace) on June 25, 27 and 28, 2013 (June 2013 D/F Test). The purpose of this testing was to attempt to establish compliance with the D/F emissions limitations of the Secondary Lead NESHAP. During the testing, the furnace exhaust temperature was not measured or recorded.

36. During the February 2014 inspection, Exide personnel stated that the Bin Room Baghouse No. 2 was under construction and was expected to be operational in May 2014.

37. During the February 2014 inspection, Exide personnel stated that construction for Refinery Baghouse No. 2 had not yet begun, but was slated to begin in 2016.

Finding of Violations

Violations of the NESHAP for Secondary Lead Smelting

38. By failing to include the Strip Casting Machine in a total enclosure, Exide has violated the total enclosure standards established in 40 C.F.R. § 63.544. Exide also has violated the associated differential pressure monitoring requirements in 40 C.F.R. § 63.548(k)(2).

39. By failing to develop and follow standard operating procedures designed to minimize emissions of total hydrocarbon for each startup or shutdown scenario anticipated, Exide violated the standards established in 40 C.F.R. § 63.543(l).

40. By failing to install, calibrate, maintain, and continuously operate a device to monitor and record the temperature of the furnace exhaust streams consistent with the requirements for continuous monitoring systems in 40 C.F.R. § 63.8, Exide has violated the monitoring requirements of § 63.548(j)(1).

41. By failing to conduct a performance evaluation for the temperature monitoring device prior to, or in conjunction with, the initial performance test to determine compliance with

the D/F emissions limits, Exide has violated the monitoring requirements of 40 C.F.R. § 63.548(j)(2).

42. By failing to monitor temperature during the June 2013 D/F Test, Exide failed to monitor and record the temperature of the furnace exhaust streams every 15 minutes during the initial performance test for D/F, and failed to determine an arithmetic average for the recorded temperature measurements, in violation of 40 C.F.R. § 63.548(j)(3).

43. By failing to improve ventilation at the breaker room, described as "required" to ensure compliance with the NESHAP in the 2012 Ventilation Study, Exide failed to operate the Facility in a manner consistent with good air pollution control practices for minimizing emissions, in violation of 40 C.F.R. § 63.543(k).

44. Exide's failures to satisfy the requirements of 40 C.F.R. Part 63, Subpart X, constitute violations of Section 112(i)(3) of the CAA, 42 U.S.C. § 7412(i)(3).

Violations of the Title V Permits

45. By failing to complete construction of Bin Room Baghouse No. 2 by the effective date of the Title V Permit, and by failing to operate Bin Room Baghouse No. 2 at all times that the two lead pig casting machines and the eleven pot furnaces are in operation, Exide has violated and continues to violate Condition D.2.4(a) of the Title V Permit, and has failed to demonstrate continuous compliance with Condition D.2.1 and D.2.2.

46. By failing to complete construction of Refinery Baghouse No. 2 by the effective date of the Title V Permit, and by failing to operate Refinery Baghouse No. 2 at all times that slag crushing is in operation, Exide has violated and continues to violate condition D.3.4(b) of the Title V Permit, and has failed to demonstrate continuous compliance with Conditions D.3.1 and D.3.2.

47. Exide's violations of its Title V Permit are actionable under Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3).

Environmental Impact of Violations

48. Exide's violations resulted in increased emissions of lead. Lead can affect almost every organ in the body, but is most detrimental to the nervous system. In children, low levels of lead in the blood can result in permanent damage to the brain and nervous system, leading to behavior and learning problems, lower IQ, hearing problems, slowed growth, and anemia. In adults, lead has nervous system effects, cardiovascular effects, and causes decreased kidney function. Lead can also lead to reproductive problems for both men and women and has serious effects on pregnancy and developing fetuses.

49. Exide's violations resulted in increased emissions of PM. PM, especially fine particulate, contains microscopic solids or liquid droplets, which can get deep into the lungs and cause serious health problems. PM exposure contributes to irritation of the airways, coughing, and difficulty breathing, decreased lung function; aggravated asthma, chronic bronchitis, irregular heartbeat, nonfatal heart attacks, and premature death in people with heart or lung disease.

50. Exide's violations may have resulted in increased emissions of THC and volatile organic compounds (VOCs). VOCs can cause eye, nose, and throat irritation, headaches, loss of coordination, nausea, damage to liver, kidney, and central nervous system. VOCs are major precursors in the formation of atmospheric and ground-level ozone, a photochemical oxidant associated with a number of detrimental health effects, environmental, and ecological effects. Breathing ozone contributes to a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level ozone also can reduce lung function and inflame lung tissue. Repeated exposure may permanently scar lung tissue.

51. Exide's violations may have caused increased emissions of D/F. D/F can cause a number of health effects. The most well known member of the D/F family is 2,3,7,8 TCDD, which is a suspected human carcinogen. In addition, people exposed to D/F have experienced changes in hormone levels. Studies show that animals exposed to D/F experienced changes in their hormone systems, changes in the development of the fetus, decreased ability to reproduce, and suppressed immune system.

4/17/14
Date

George T. Czarniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Finding of Violation, No. EPA-5-14-IN-03, by Certified Mail, Return Receipt Requested, to:

Mr. Mike Henry
Environmental Manager
Exide Technologies
2601 West Mt. Pleasant Boulevard
Muncie, Indiana 47302

Mr. Frederick Ganster
Exide Technologies
Director Environment, Health, & Safety
2900 Montrose Ave
Reading, PA 19605 7009 1680 0000 7676 2922

I also certify that I sent copies of the Finding of Violation by first-class mail to:

Mr. Phil Perry, Chief
Air Compliance and Enforcement Branch
Indiana Department of Environmental Management
100 N. Senate Ave.
Mail Code 61-53 IGCN 1003
Indianapolis, IN 46204-2251

On the 22 day of APRIL 2014.

Loretta Shaffer

Loretta Shaffer, APA
Planning and Administrative Section

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7676 2915